DOCUMENT RESUME

ED 129 376 JC 760 538

AUTHOR Mincks, Sue
TITLE A Writing Teacher Looks at Individualization.
PUB DATE Jul 76
NOTE 17p.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *Educational History; Humanistic Education; *Individualized Instruction; Individualized Programs; *Pacing; *Performance Based Education; Systems Approach
IDENTIFIERS Dalton Plan; Winnetka Plan

ABSTRACT

This paper provides an historical and contemporary overview and criticism of individualized instruction, beginning with the Dalton Plan and Winnetka Plan of the 1920's. While there appears to be a proliferation of new individualized methods and procedures, they have existed in several forms in the past and have been utilized on a large scale, international in dimension. Although individualized systems are designed to provide opportunities for self-pacing by students, critics have charged that this method results in the devolution of teachers to mechanics and trainers. Individualized instruction is further criticized for its lack of opportunity for group interaction and for its lack of flexibility, as the planned curriculum has been broken down into multiple subunits, each requiring the student's attention, regardless of his needs. Individualized systems seem to promote linearity, continuity, and insularity where some argue that a more holistic and synthesized approach would be more appropriate. Demands for accountability will continue for some time and individualized systems lend themselves to objective evaluation of student learning, albeit the subjective is often ignored. Scrutiny and criticism of the individualized approach should be continued. Concomitantly, the most creative approaches possible within the scope of individualized instruction should be sought. (JDS)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED129376

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

UNIVERSITY OF ARIZONA

A WRITING TEACHER LOOKS AT INDIVIDUALIZATION

HIGHER EDUCATION 360
THE COMMUNITY COLLEGE
RAYMOND E. SCHULTZ
FALL 1975

By Sue Mincks
July, 1976

"You sit on the bed by the empty birdcage, run through your exercises and let the cow of your mind eat its way out of the haystack that has collapsed on it."

Tom Robbins, Even Cowgirls Get The Blues Boston: Houghton Mifflin Company, 1976 p. 262.

JC 760 538

This paper had its beginnings in the suggestion by the professor for which it is written that I attempt to do a research paper for his course which would be relevant and meaningful to me. As a teacher of composition in a community college, I was drawn to one of the questions that constantly challenges all teachers: How can I, as a teacher, attempt to meet the individual needs of a whole classroomful of students - each with her/his own abiliites/skills, interests, experiences, potentials, goals, and level of motivation? I expected to find, in my research, some helpful accounts of how individual teachers (or departments or schools) have responded to this challenge. And I did in fact find some articles of this nature. But more importantly, I discovered a plethora of material which described and sometimes evaluated the new educational products/methods which can be lumped together under the term "individualization". I became increasingly aware of the large contemporary movement in this area, and all that it incorporated and implied. I became acquainted with the large number of descriptively named new educational systems which include Individually Guided Education (IGE), Individually Guided Instruction (IGI), Individually Prescribed Instruction (IPI), Self-Paced Instruction (SPI), Personalized System of Instruction (PSI), Competency Based Instruction (CBI), Competency Based Education (CBE), Performance-based Programs (PBP), Individual Mathematics System (IMS), mediated instruction, criteria-based instruction, criterion-referenced instruction, performance based education, performance contracting, and the contingency managed approach. I found that the writings in this area often mention learning activity packages (LAPs), unipacs, mastery, behavioral technology, operant conditioning, behavior modification, feedback and revision loops, behavior training, guaranteed learning, and, most especially, accountability. I discovered that whole colleges[1] as well as whole writing programs within colleges[2] have been re-structuring their teaching using the new individualized approaches and that in some states legislation is turning accountability into a mandate.[3] In this paper, I would like to look at some aspects of this current movement in individualized instruction: what does it consist of?, how does it compare with older plans for individualization?, what criticisms has it encountered?, and what is its future?

Actually, individualized education is not a unique or new approach. The idea of fitting the curriculum to the students' needs and academic achievement levels was first established in our earliest schools, where students from every grade level were taught in one room. Later, the period of the 1890's to the 1920's contained many educational experiments in the area of individualization and produced plans for implementation which were highly publicized and promoted. The two most famous and successful plans from this period, the Dalton Plan (Dalton, Mass.) and the Winnetka Plan (Winnetka, Ill.), achieved varying degrees of success in different locations. I found it interesting that the basic components of these two plans from the 1920's include almost all the important components of the current individualized approaches.

In 1925, the Dalton Plan had been implemented in more than 1500 schools in England, 450 schools in Japan, 250 in China, at least 200 in the United States, 50 in India; was designated as the official method in Holland and Moscow; and was gaining followers in Norway, Germany, Poland, Austria, and Spain. This plan was developed by Helen Parkhurst who insisted that her plan was"a vehicle for the curriculum rather than being a plan based upon any particular curricular content."[4]

> Students were given a series of subjects to learn within a given block of time, typically twenty days. However, they were free to pace themselves through each of the subjects. They were also free to move about the school building at their own discretion to study in any one of the given "laboratories"which were set up for each subject.[5]

Parkhurst's idea of self-pacing is an important component of today's individualized approaches to learning; her plan for free movement within the schools is comparable to today's "flexibly scheduled" schools; and her use of laboratories closely parallels the use of today's instructional materials center (IMC) or learning resources center (LRC).[6] Also in the Dalton Plan, students were responsible for choosing the learning mode which they deemed most appropriate for themselves; many of the current individualized approaches include this component. Student contracts are an offshoot of the Dalton Plan and also an integral part of many of the current systems.

The Winnetka Plan, which operated successfully in Winnetka, Illinois

from 1919 up until the early 1940's, also contains

> ...many of the characteristics of "innovations" in the 1960's and 1970's. For example, Washburne, the originator of the Winnetka Plan, stated as his first principle that the teacher should "Decide the exact amount of knowledge and skill to be mastered in the individualized subjects. State this in terms of goals of achievement." Washburne's "goals of achievement" are almost identical with the "behavioral objectives" or "specific performance objectives" of the 1970's.[7]

Washburne also anticipated one of the principles of today's programmed textbooks by advocating a test for which only one possible right answer could be supplied. In addition, he suggested the use of "assignment booklets" which have many of the characteristics of today's unipacs or learning activity packages. Washburne also included the idea of mastery in his plan:

> "Permit each child to progress through his assignment sheets or individual instruction books at his own rate, testing him on each unit of work as soon as he completes it. Never allow him (unless he is subnormal in mentality or health) to proceed with one unit until he has mastered the preceeding one."[8]

Another integral part of both the old and current approaches is the use of permanent sources of information so that students <u>can</u> pace themselves through the material: lectures, group work, and demonstrations usually become peripheral/motivational in individualized education. Thus, self-pacing, flexible scheduling, the use of learning centers, self-selection of learning modes, contracts, specific performance objectives, learning activity packages, and mastery were all present in the individualized approaches of the 1920's. In fact, the only other basic and important features of the new approaches which don't seem to be a part of the older plans are the use of proctors and the focus on immediate feedback.[9]

These older and current plans have more than their basic components in common. Both advocate an educational model built on the idea of efficient production: "...there is something especially contemporary about [illegible]y in which proponents of the Dalton Plan drew upon analogies with [illegible]duction techniques."[10] I think it's also important to [illegible]t many of the earliest important conributions to the contemporary systems approach derived from industry and the military. In <u>A Systems Approach to Community College Education</u>, the author traces the historical

development of the current systems approach to instruction. Early contributions to this approach include an early post World War II flowchart that focuses on the trainee-instructor relationship,[11] an application of electrical engineering concepts to the problems of management and economics developed by a professor of industrial management,[12] an important report/assessment of the art of instructional systems design which was produced under a contract with the Department of the Army, and "A Model for Designing Instructional Systems" which came out of a 1964 U.S. Air Force workshop.[13] This military association is further strengthened when we find that Fred Keller, who designed the Personalized System of Instruction, first came in contact with the approach in a military training center. Later, he applied the principle of immediate reinforcement to the early training of Signal Corps personnel in the reception of Morse-code signals.[14]

Keller states that in his method, the teacher becomes "...an educational engineer, a contingency manager."[15] Writers who have a less favorable attitude toward this teaching method often refer to the teachers who employ it as trainers, mechanics, and technicians.[16] Bhaerman, a critic of systems-technology approaches, defines the new role of the teacher as the "...educational engineer and the educational executioner."[17] Both the older and newer individualized approaches have been widely criticized for incorporating a mechanistic approach to learning.

Other criticisms have been applied to both. For example, a frequent criticism of the Dalton Plan was its lack of group work.[18] This criticism is often applied to the new approaches. Studies have suggested that students suffer from isolation and monotony in individualized classes.[19] One study concluded: "It may be that the old notion that students learn from each other is even more important than we thought: that the classroom situation does indeed provide a beneficial feedback ...,including the chance to learn from the mistakes of others and the sense that the student does not need to respond to every question, but can learn from people who do respond."[20] One college which operates on a self-paced system attempted to incorporate group interaction by making twenty percent of its course modules into seminars. Before joining a seminar, students check out materials and prepare. Their level of participation in the seminar

is rigidly structured: "The students are expected to participate in the discussion, and their contributions are noted by the instructor and are used as the basis for assigning mastery to the topic. Failing to participate or to give significant information, they are asked to repeat the seminar with another group."[21]

This approach to group work seems to me to effectively exemplify another criticism of individualized approaches: how much individualization is actually taking place? One critic from the 1960's explained the failure of the earlier plans as follows: "In curricular plans based upon individual instruction, the individualization has been largely illusory. A considerable mechanistic quality has limited such schemes, and the fact that the individual students came through the successive turnstiles at their own pace has been made to signify more than it actually means."[22] Keller's system for self-pacing still places the final examination at the same time for all students "with certain exceptions", at the end of the term.[23] Most individualized approaches rely upon a preplanned curriculum which has been broken into small units thus allowing little flexibility for altering the content to meet the individual needs of different classes and individual students. The concept of individualization can be obscured by the carefully managed approaches to learning which purport to be based on it. In an article called "Writing for Nobody", Edward White states,

> We are being routinely asked in our culture to accept images for substance, media for messages. If we can all agree that something is going on, it doesn't much matter if it is really going on or not. And if everyone can pretend that certain mechanical activities teach writing, it is much easier for us to live with ourselves and our responsibilities.[24]

The manifestations of mechanistic characteristics, the question of actual individualization, and the lack of community typified by the minimization of group work have all been included in the criticism of both the older and newer individualized approaches.

The opinions and evaluations of the effectiveness of the current methods of individualization vary greatly and sometimes appear to depend more on the periodicals presenting the views than on any commonly accepted criteria for evaluation. Some periodicals, such as Educational Technology,

Journal of Applied Behavior Analysis, and Programmed Learning and Educational Technology tend to focus on the positive aspects of individualized instruction while other periodicals tend to present a more balanced perspective.[25] It seems important to me to enter into a discussion of some of the areas in which I think the new approaches to individualization are most susceptible to criticism. In order to do this, I'm going to have to stray a little further away from the ideas and attitudes previously explored in this paper.

If all these ideas were known and tried and criticized years ago, how is it that we are currently confronted with a resurgence of activity in this area? I think that we can see that certain aspects of our contemporary culture indicate a reliance upon science, technology, industry, and the military for our perspectives on societal structures, values, and definitions of progress. In The Revolt of the Masses, Ortega y Gasset defines "mass man" in terms of inertia rather than size, and calls him a "primitive" because he regards civilization as his ancestors regarded nature in pre-history - as an automatically self-renewing, self-perpetuating force. He contrasts "mass man" with "civilized man", who recognizes that civilization, like art and eroticism, is an artificial creation. He states that the civilized man's most important quality is the capacity to be open to the insecurity of discontinuity. The civilized man realizes that civilization is not static, but must constantly be worked at, worried over, made and remade. The enemy of civilization is insularity. Its critical point is signaled not by the absence of growth - because it can proliferate profusely - but by whether the growth is linear rather than differenciated, duplicative rather than discontinuous.[26] My strongest criticism of the new individualized teaching methods is that they reinforce continuity and linearity. The idea of mastery, of proceeding from one carefully predetermined step to the next predetermined step, seems to me to promote a continued reliance on continuity and linearity. This approach to the educational process appears to promote insularity and a view of civilization more like Ortega y Gasset's mass man's outlook than one that can emerge from the capacity to be open to the insecurity of discontinuity. Students need more than prepackaged "knowledge" and a carefully managed approach to learning in order to prepare to participate creatively in to-

day's complex world.

Many critics have focused on the limits mastery learning places on content. For example, "The current accountability craze is forcing us to resort to exams calling for information reflecting a student's ability to memorize, not to synthesize or analyze. We stress the objective and minimize or ignore the subjective. ...We end up by stressing the measurable and ignoring the intangible areas of interpretation or even creativity."[27] Can we afford to neglect these areas as we prepare for the future? Can we rely on a method that promotes individual approaches to problem solving in an era when group interaction and problem solving techniques appear likely to be of crucial importance?

Two writing teachers went on an island retreat to try to find an answer to the question of who should determine what a student needs to know. They reviewed and evaluated and searched and probed. They discussed their students: "We have students who are not in touch with themselves or their world because they are not in touch with the language and images which compose their own personal world."[28] They finally decided to try "an approach to teaching which asserts that the experience of learning is more important than what is learned."[29] Here are the goals they decided on:

1. To reunite the senses and feeling;
2. To emphasize self-definition and self-actualization;
3. To create an atmosphere where failure can be seen as a natural part of the learning process;
4. To develop a problem solving methodology through a question-centered rather than an answer-oriented environment; and finally,
5. To encourage creative rather than standard or linear responses as necessary for survival in a complex world.[30]

It's highly unlikely that these goals could be approached using mastery learning techniques. It also seems unlikely that a course in which the content is completely open at the beginning could be included in a mastery oriented curriculum. During my senior year in college, I took a course called "Senior Seminar" which was particularly stimulating and relevant for me. I'm including the course description here, because I think it also demonstrates the creative approaches which lie beyond the scope of the new individualized systems of instruction:

The real purpose of this course is to decrease the student's

> dependency on the teacher, for in the long run all education is self-education. The nature of the course will depend on the student in it, and might be organized along these lines: (1) Independent projects: re-reading works that have influenced you deeply, sharing them, digging around in them. (2) Reading together some works that attempt to see life (and literature) whole. (3) Investigating the creative process, both as an artistic endeavor and as an attitude toward life. Speculating on the possibilities for creative living in the world today. (4) Creating: I will expect students to make an honest effort to be creative in some form--any--form. Much of this course will be devoted to an attempt to ground learning imaginatively in experience, to unify what you know with what you have lived, and are living. Goodbye to educational roles; hello to education. Please try to keep the following hour free, so we can follow our minds and not the clock.[31]

Some of the proponents of individualized education appear to offer a far too simple answer to a vastly complex problem. This criticism exists in various forms as a large part of the published criticism. In a recent article, Lionel Trilling made a statement which could serve as a dictum for those proponents of individualized education who feel that they have found the answer to our current educational problems:

> Any doctrine, that of the family, religion, the school, that does not sustain this increasingly felt need for a multiplicity of options and instead offers an ideal of a shaped self, a formed life, has the sign on it of a retrograde and depriving authority, which, it is felt, must be resisted.[32]

Students and educational needs vary tremendously and any one approach which purports to offer the solution demands close scrutiny.

Irrespective of the limitations inherent in accountability/individualization, we can be sure that the new modes will continue to find supporters. Our country's continued reliance on an outdated definition of progress[33] will undoubtedly continue for some time despite the fact that various events/aspects of our contemporary culture would seem to at least encourage exploration of other directions: despite Vietnam, Chile, the threat of nuclear war, Watergate, our dwindling resources, the poor and sick and exploited in our country and others around the world, and numerous other indications that "it isn't working", we continue to rely on the industrial-military definition of progress. This creates a favorable atmosphere for an approach to learning which uses the industrial model and was used

in military training; we will continue to experience the growth and proliferation of what one critic calls "know-nothing accountability".[34] Despite the negative opinions/assertions I indulged myself in, I don't doubt that accountability will be with us for some time, at least until we see much more evidence of a re-definition of progress taking place within our society. Even the National Council of Teachers of English, who labels the new behavioral teaching mode as a "possibly dangerous activity" and feels that defining English within this mode may result in "real damage to English instruction", does not advocate resisting the new teaching methods. Instead, the Council advocates that teachers be open-minded while engaging in "a careful appraisal of the possible benefits and the present limitation of behavioral definitions of English with reference to the humanistic aims which have traditionally been valued in this discipline."[35] My reccomendation would be that we continue with our scrutiny and criticism and that we seek out the most creative approaches possible within the scope of this teaching approach.

There are already some indications of the potential for creative learning within an individualized approach. Worcester Polytechnic Institute uses an innovative campus-wide program for undergraduates which is "individually structured, student-centered, project-oriented, with strong components in the social sciences and the humanities." Besides their own self-paced program (the WPI Plan), they make use of other self-paced programs such as "individually prescribed instruction". They have four degree requirements: the "competency", an exam requiring students to demonstrate their understanding of their major fields; the "sufficiency", designed to confirm that students have a grasp of the humanities as an essential component of their lives; the "major qualifying project", in which students solve a problem in their chosen fields; and the "interactive qualifying project", which "relates students' major field to the larger world, specifically to human and societal needs and values."[36] In 1974, WPI opened a Washington Project Center where each year 80 undergraduates and 8 resident faculty members work to complete qualifying projects by assisting governmental and nongovernmental agencies in solving a wide variety of real-life problems; many projects are in bioethics and ecology. One interactive project, for example, explored the values involved in deciding which patients

should get priority in access to rare therapy equipment. This college, with a high degree of dependence on individualized teaching methods, seems to be preparing its students for the future in a creative and challenging way. Obviously, this approach can't meet the needs of all students; for one thing, it appears to be oriented towards four year full time students, a segment of the student population which is currently declining. We should continually search for the ways to criticize and resist the use of the new individualized methods when their use seems inappropriate and damaging to our development, and the wisdom to use them to their most creative potential when this use appears beneficial.

Writing this paper has been a meaningful experience for me; I found that attempting to determine my attitude toward individualized instruction has had the effect of making me look at the totality of the educational experience/process - what it entails, what it means, what it <u>can be</u>.

NOTES

[1]Robert J. Toft. College IV:Individualized Instruction for an Entire College (Bethesda, Md.: ERIC Document Reproduction Service, Ed. 100 362, 1974); Erwin L. Harlacher. Competency-Based Learning Systems (Bethesda, Md.: ERIC Document Reproduction Service, Ed. 097 087, 1974); Warland D. Wight, "Obtaining Competence with Competencies: A Case Study in Higher Education," Educational Technology, XIV, No.11 (1974).

[2]Susan Wittig. Three Behavioral Approaches to the Teaching of College-Level Composition:Diagnostic Tests, Contracts, and Computer-Assisted Instruction (Bethesda, Md.: ERIC Document Reproduction Service, Ed. 099 887, 1974); "English Programs in Three Two-Year Colleges," College English, XXXV, No.8 (1974).

[3]James F. Day, "Behavioral Technology: A Negative Stand," Intellect, CII (February, 1974), 304.

[4]Frank M. Grittner, "Individualized Instruction: An Historical Perspective," The Modern Language Journal, LIX, No.7 (1975), 325.

[5]Ibid.

[6]Ibid., p. 327.

[7]Ibid.

[8]Ibid., pp. 330-331.

[9]Every individualized approach does not include all of the components I listed, I tried to cover the basic features of most plans. I have taken some liberties in lumping individualization, systems approaches, accountability, etc. together in this paper - it's important to keep in mind that I'm referring specifically to the individualized approaches within each method.

[10]Grittner, p. 327.

[11]David E. Barbee, A Systems Approach to Community College Education (Auerbach Publishers, Inc., 1972), p. 60.

[12]Ibid., p. 62.

[13]Ibid., p. 67.

[14]Fred S. Keller, "Good-bye, Teacher...," Journal of Applied Behavior Analysis, I, No.1 (1968), 79.

[15]Ibid., p. 88.

[16]Day, p. 304.

[17]Robert Bhaerman, "Accountability: a Short Course," American Teacher, LVII, No.8 (1973), 16.

[18]Grittner, p. 331.

[19]George Royce and James Shank, "Scorecard for Individualized Instruction," The Science Teacher, XLII, No.9 (1975), 28.

[20]Judith Budz and Terry Grabar, "Tutorial versus Classroom in Freshman English," College English, XXXVII, No.7 (1976), 656.

[21] Toft, p. 3.

[22] "The Curriculum and Individual Differences," Individualizing Instruction: The Sixty-First Yearbook of the National Society for the Study of Education cited by Grittner, pp. 327-328.

[23] Keller, p. 81.

[24] Edward M. White, "Writing for Nobody," College English, XXXI, No.2 (1969), 167.

[25] A balanced view can be found in: Kenneth T. Henson, "Accountability and Performance-Based Programs in Education: Some Pros and Cons," Intellect, CII (January, 1974), 250-52.

[26] Irving H. Buchen, "The Limits to Individuality: Past and Future Mass Models," Intellect, CIII, No.2361 (1974), 185.

[27] John Pekich, "Behavioral Objectives: A Danger to the Spirit," Community College Review, (June, 1975), p. 23.

[28] Timothy E. McCracken and W. Allen Ashby, "The Widow's Walk: An Alternative for English 101 - Creative Communications," College English, XXXVI, No.5 (1975), 557.

[29] Ibid., p. 561.

[30] Ibid.

[31] Gerald Grow, course description for "Senior Seminar", Engish 195, San Francisco State University, Fall, 1970.

[32] Lionel Trilling quoted by Herbert I. London, "The Case for Non-traditional Learning," Change, VIII, No.5 (1976), 27.

[33] Contemporary future theorists (P.Slater, T.Rozak, T.Reich, P.Ehrlich, J.K.Galbraith, and others) have focused their attention on the traditional concept of progress and its inability to relate to current and future needs/problems; a subject too broad to elucidate here.

[34] Bhaerman, p. 3.

[35] "Resolutions Passed by the National Council of Teachers of English at the Fifty-Ninth Annual Meeting," College English, XXXI, No.5 (1970), 529.

[36] George W. Hazzard, "For the Technological Humanist: the WPI Plan," The American Biology Teacher, XXXVII, No.1 (1975), 19.

BIBLIOGRAPHY

Ashby, W. Allen, and McCracken, Timothy E. "The Widow's Walk: An Alternative for English 101 - Creative Communications." College English, XXXVI, No. 5 (1975), 555-570.

Barbee, David E. A Systems Approach to Community College Education. Auerbach Publishers, Inc., 1972.

Bhaerman, Robert. "Accountability: a Short Course." American Teacher, LVII, No. 8 (1973), 16.

Born, David G.; Gledhill, Stephen M.; and Davis, Michael L. "Examination Performance in Lecture-Discussion and Personalized Instruction Courses." Journal of Applied Behavior Analysis, V, No. 1 (1972) 39-43.

Buchen, Irving H. "The Limits to Individuality: Past and Future Mass Models." Intellect, CIII, No. 2361 (1974), 184-189.

Budz, Judith and Grabar, Terry. "Tutorial versus Classroom in Freshman English." College English, XXXVII, No. 7 (1976), 654-656.

Chastain, Kenneth. "An Examination of the Basic Assumptions of 'Individualized' Instruction." The Modern Language Journal, LIX, No. 7 (1975), 334-345.

Cyr, Charles R. An Anti-Media Message for the English Classroom. Bethesda, Md.: ERIC Documents Reproduction Service, Ed. 095 542, 1974.

Day, James F. "Behavioral Technology: A Negative Stand." Intellect, CII (February, 1974), 304-306.

"English Programs in Three Two-Year Colleges." College English, XXXV, No. 8 (1974), 879-996.

Friedman, Paul. Introspection: An Approach to Individualizing Communication Instruction. Bethesda, Md.: ERIC Documents Reproduction Service, Ed. 105 543, 1974.

Garrison, Roger H. "One-to-One: Tutorial Instruction in Freshman Composition." Implementing Innovative Instruction - New Directions for Community Colleges. Edited by Roger H. Garrison. San Francisco: Jossey-Bass Inc., Spring, 1974. pp. 55-84.

Gebhardt, Richard C., and Smith, Barbara Genelle. "Competency-Based Teacher Education and College English Programs." College Composition and Communication, XXV, No. 2 (1974), 166-172.

Grittner, Frank M. "Individualized Instruction: An Historical Perspective." The Modern Language Journal, LIX, No. 7 (1975), 323-333.

Grow, Gerald. Course Description for "Senior Seminar," English 195, San Francisco State University, Fall, 1970.

Harlacher, Erwin L. Competency-Based Learning Systems. Bethesda, Md.: ERIC Documents Reproduction Service, Ed. 097 087, 1974.

Hazzard, George W. "For the Technological Humanist: The WPI Plan." The American Biology Teacher, XXXVII, No. 1 (1975), 19-20.

Henson, Kenneth T. "Accountability and Performance-Based Programs in Education: Some Pros and Cons." Intellect, CII (January, 1974), 250-52.

"Individually Guided Education." Intellect, CII, No. 2353 (1973), 145-46.

Johnson, Kent, and Sulzer-Azaroff, Beth. "PSI for First-Time Users: Pleasures and Pitfalls." Educational Technology, XV, No. 11 (1975), 9-17.

Keller, Fred S. "Good-bye, Teacher...." Journal of Applied Behavior Analysis, I, No. 1 (1968), 79-89.

Kneisel, Paul R. "Inventory Questions Can Facilitate Individualization." Improving College and University Teaching, XXII, No. 3 (1974), 175-76.

Knoell, Dorothy, and McIntyre, Charles. Planning Colleges for the Community. San Francisco, California: Josey Bass, Inc., 1974. pp. 99-103.

Kulik, James A.; Kulik, Chen-Lin C.; and Smith, Beverly B. "Research on the Personalized System of Instruction." Programmed Learning and Educational Technology, XIII, No. 1 (1976), 23-30.

London, Herbert, I. "The Case for Nontraditional Learning." Change, VIII, No. 5 (1976), 25-29.

Pekich, John. "Behavioral Objectives: A Danger to the Spirit." Community College Review, (June, 1975), pp. 22-24.

"Resolutions Passed by the National Council of Teachers of English at the Fifty-Ninth Annual Meeting." College English, XXXI, No. 5 (1970), 529.

Roueche, John E. "Can Mastery Learning Be Humane?" Community College Review, III, No. 1 (1975), 14-21.

Royce, George, and Shank, James. "Scorecard for Individualized Instruction." The Science Teacher, XLII, No. 9 (1975), 27-29.

Schultz, R. E. "Methodological Issues in Curriculum Research." Review of Educational Research, XXXIX, No. 3 (1969), 359-365.

Swindle, Robert E. "Individualized Teaching - Negative Report." Journal of Business Education, L, No. 2 (1974). 61.

Toft, Robert J. College IV: Individualized Instruction for an Entire College. Bethesda, Md.: ERIC Documents Reproduction Service, Ed. 100 362, 1974.

White, Edward M. "Writing for Nobody." College English, XXXI, No. 2 (1969), 166-168.

Wight, Warland D. "Obtaining Competence with Competencies: A Case Study in Higher Education." Educational Technology, XIV, No. II (1974), 46-48.

Wittig, Susan. Three Behavioral Approaches to the Teaching of College-Level Composition: Diagnostic Tests, Contracts, and Computer-Assisted Composition. Bethesda Md.: ERIC Documents Reproduction Service, Ed. 099 887, 1974.

UNIVERSITY OF CALIF.
LOS ANGELES

NOV 12 1976

CLEARINGHOUSE FOR
JUNIOR COLLEGES